

SEQUENCE LISTING

<110> Donovan, Stephen
<120> Clostridial Toxin Derivatives and Methods for Treating Pain
<130> D-2875DIV
<150> US 09/489,667
<151> 2000-01-19
<160> 18
<170> PatentIn version 3.1
<210> 1
<211> 11
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: This is a substance P and is very well known in the art.

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Xaa at position 11 is Methionine Amide

<400> 1

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Xaa
1 5 10

<210> 2
<211> 12
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: Precursor to substance P, which is very well known in the art.

<400> 2

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly
1 5 10

<210> 3
<211> 13
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: This is a precursor to
substanc
e P and is very well known in the art.

<400> 3

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys
1 5 10

<210> 4
<211> 14
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: This is a precursor to
substanc
e P and is very well known in the art.

<400> 4

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys Arg
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<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: This is a carboxy-e
ster synt
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<221> MISC_FEATURE
<222> (12)..(12)
<223> Xaa at position 12 is Glycine Methyl Ester

<400> 5

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<210> 6
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: This is a carboxy-e
ster synt
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<220>
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<223> Xaa at position 13 is Lysine Methyl Ester

<400> 6

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: This is a carboxy-e
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hetic precursor to substance P.

<220>
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<223> Xaa at position 14 is Arginine Methyl Ester

<400> 7

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys Xaa
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<210> 8
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: This is a carboxy-ester syntetic precursor to substance P.

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<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Xaa at position 12 is Glycine Ethyl Ester
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<400> 8

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<210> 9
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<400> 9

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Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Xaa
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<210> 10
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<220>
<223> Description of Artificial Sequence: This is a carboxy-ester syntetic precursor to substance P.

<220>
<221> MISC FEATURE

<222> (14)..(14)
<223> Xaa at position 14 is Arginine Ethyl Ester

<400> 10

Arg Pro Lys Pro Gln Gln Phe Phe Gly Leu Met Gly Lys Xaa
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<210> 11
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<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: This is a naturally occurring amino thermal peptide fragment derived from substance P.

<400> 11

Arg Pro Lys Pro
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<210> 12
<211> 7
<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: This is a naturally occurring amino acid thermal peptide fragment derived from substance P.

<400> 12

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<210> 13
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<212> PRT
<213> Unknown

<220>
<223> Description of Unknown Organism: This is a naturally occurring amino thermal peptide fragment derived from substance P.

<400> 13

Arg Pro Lys Pro Gln Gln Phe Phe Gly
1 5

<210> 14

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: This is an analog o
f substan
ce P.

<220>

<221> MISC_FEATURE

<222> (2)..(11)

<223> Xaa at position 2 is D-form of Proline, Xaa at position
7 is D-fo
rm of Phenylalanine, Xaa at position 9 is D-form of Tryp
tophan, X
aa at position 11 Methionine Amide

<400> 14

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Xaa
1 5 10

<210> 15

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: This is an analog o
f substan
ce P.

<220>

<221> MISC_FEATURE

<222> (2)..(9)

<223> Xaa at positon 2 is D-form of Proline, Xaa at position 7
is D-for
m of Phenylalanine, Xaa at position 9 is D-form of Trypt
ophan

<400> 15

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Met Gly
1 5 10

<210> 16

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: This is an analog o
f substan
ce P.

<220>

<221> MISC_FEATURE

<222> (2)..(11)

<223> Xaa at position 2 is D-form of Proline, Xaa at position
7 is D-fo
rm of Tryptophan, Xaa at position 9 is D-form of Tryptop
han, Xaa
at position 11 is Methionine Amide

<400> 16

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Xaa
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<210> 17

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: This is an analog o
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ce P.

<220>

<221> MISC_FEATURE

<222> (2)..(9)

<223> Xaa at position 2 is D-form of Proline, Xaa at position
7 is D-fo
rm of Tryptophan, Xaa at position 9 is D-form of Tryptop
han

<400> 17

Arg Xaa Lys Pro Gln Gln Xaa Phe Xaa Leu Met Gly
1 5 10

<210> 18
<211> 11
<212> PRT
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<220>
<223> Description of Artificial Sequence: This is an analog o
f substan
ce P.

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Xaa at position 11 is Methionine Amide

<400> 18

Arg Pro Cys Pro Gln Cys Phe Tyr Gly Pro Xaa
1 5 10